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[54] PRODUCTION OF STRUCTURE FOR AIR CLEANING

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PROBLEM TO BE SOLVED: To ensure superior suitability to impregnation from the surface of a porous body and to produce a structure for air cleaning contg. tightly fixed titanium dioxide and maintaining its catalytic effect over a long period of time.

SOLUTION: Titanium dioxide particles are highly dispersed in water to form a titanium dioxide-contg. slurry and this slurry is impregnated into the surface of an inorg. porous body and is dried to produce the objective structure for air cleaning. Preferably a dispersant is added to the titanium dioxide-contg. slurry and ultrasonic treatment is carried out. The titanium dioxide particles are tightly fixed by adding 10-100 pts.wt. silica sol, alumina sol or sodium silicate as a fixing agent to the titanium dioxide-contg. slurry. The titanium dioxide particles are preferably anatase type titanium dioxide hydrate particles having 50-300 m²/g specific surface area and 5-90% loss on heating at 150-800°C. Ultrasonic vibration or thermal vibration is preferably applied at the time of impregnating the titanium dioxide- contg. slurry into the surface of the porous body.
